

Abstract

An object activity modeling method which can efficiently model complex objects such as a human body is provided. The object activity modeling method includes the steps of (a) obtaining an optical flow vector from a video sequence; (b) obtaining the probability distribution of the feature vector for a plurality of video frames, using the optical flow vector; (c) modeling states, using the probability distribution of the feature vector; and (d) expressing the activity of the object in the video sequence based on state transition. According to the modeling method, in video indexing and recognition field, complex activities such as human activities can be efficiently modeled and recognized without segmenting objects.